Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Globalstar, Inc. Petition for Notice	)	RM-11808
of Inquiry Regarding the Operation	)	
of Outdoor U-NII-1 Devices	)	
in the 5 GHz Band	)	

COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association ("SIA")[1,2] supports the above-captioned Globalstar, Inc. ("Globalstar") Petition for Notice of Inquiry, which requests that the Commission initiate a proceeding to investigate and, if necessary, remediate the growing interference into Globalstar's licensed feeder link spectrum at 5091 to 5250 MHz ("5.1 GHz band").[3] The issues raised by the Petition are not limited to the 5.1 GHz band, but have implications for several proceedings in which the Commission has permitted or is considering allowing widely-deployed terrestrial devices to use satellite uplink spectrum. Exploration of the issues outlined by Globalstar is

[1] SIA Executive Members include: AT&T Services, Inc.; The Boeing Company; EchoStar Corporation; Intelsat S.A.; Iridium Communications Inc.; Kratos Defense & Security Solutions; Ligado Networks; Lockheed Martin Corporation; Maxar Technologies; Northrop Grumman Corporation; OneWeb; SES Americom, Inc.; Space Exploration Technologies Corp.; Spire Global, Inc.; and ViaSat, Inc. SIA Associate Members include: ABS US Corp.; Analytic Graphics Inc.; Artel, LLC; Blue Origin: DataPath Inc.; Eutelsat America Corp; Globecomm; Glowlink Communications Technology, Inc.; Hawkeye360; Hughes Government Solutions; Inmarsat, Inc.; Kymeta Corporation; L3 Technologies.; Panasonic Avionics Corporation; Planet; Telesat; TrustComm, Inc.; Ultisat, Inc.; and XTAR, LLC. For more information, visit www.sia.org.

[2] This submission is supported by all SIA members except for AT&T Services, Inc; Ligado Networks; and Space Exploration Technologies Corp.

[3] *See* Petition for Notice of Inquiry of Globalstar, RM-11808 (May 21. 2018) ("Petition"); Public Notice, *Consumer & Governmental Affairs Bureau Reference Information Center Petition for Notice of Inquiry*, Report No. 3092 (rel. June 6, 2018).

necessary to allow the Commission to make sound policy decisions based on a comprehensive understanding of the interference risks presented in these cases.

As discussed herein, satellites operated by a number of SIA members are authorized to operate earth-to-space links in bands that are shared with or proposed to be shared with terrestrial services. SIA has expressed concern about the potential of the proliferation of in-band terrestrial devices creating potentially harmful aggregate interference into satellite receivers in other proceedings, and Globalstar's demonstration of a rapid and significant 2 dB noise floor increase in the 5.1 GHz band[4] reinforces the seriousness of those concerns.

A primary responsibility of the Commission is to protect licensed operations from harmful interference.[5] While the Commission actively seeks to promote more efficient use of the radio frequency resource, it can only achieve this goal by ensuring the long-term protection of licensed incumbent services in those bands. This is certainly the case with Globalstar's licensed satellite operations within the 5.1 GHz band.

Given the technical analysis in the record demonstrating the potential for harmful aggregate interference from outdoor unlicensed operations into the Globalstar system in the 5.1 GHz band,[6] it is important that the Commission investigate and remedy any harmful interference into its satellite operations. Following this investigation, the Commission can make a determination of the appropriate actions to take to ensure that Globalstar's operations in the 5.1 GHz band are not subject to harmful interference. This investigation and subsequent Commission action could have ramifications in a number of other proceedings in which SIA is an active participant.

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[4] *See* Petition at 1-3.

[6] *See, e.g.,* 47 U.S.C. § 301; 47 C.F.R. § 15.5(b)-(c).

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For example, filings by SIA and its member companies in the *Spectrum Frontiers* rulemaking have highlighted the threat of unacceptable aggregate interference into satellite uplink operations in bands including the 24, 28, 47, and 50 GHz bands,[7] and the Commission established a docket to collect further information regarding the potential impact of terrestrial wireless device deployment on satellite networks in the 28 GHz frequencies.[8] Similarly, in the *Mid-Band Spectrum* proceeding, SIA has emphasized the risk that permitting unlicensed Radio Local Area Network ("RLAN") devices in the 6 GHz C-band uplink spectrum could compromise the quality and reliability of critical satellite services, including the delivery of video content to more than 100 million U.S. households.[9]

Open questions remain regarding the Commission's ability to effectively prevent or redress unacceptable aggregate interference, including how it will identify responsible parties and how it will ensure that interference is immediately dealt with once it occurs. The Globalstar showing demonstrates a concrete and timely need for the Commission to investigate these concerns in order to respond to aggregate interference issues in the 5.1 GHz band and develop a sound basis to develop policies that ensure protection of satellite uplink operations in other bands.

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[7] *See, e.g.*, Comments of the Satellite Industry Association, GN Docket No. 14-177, filed Sept. 30, 2016 at 14-16. [Add cites to other satellite company filings.]

[8] *See* Public Notice, Docket Established for 28 GHz Aggregate Interference Analysis, GN Docket No. 17-171, DA 17-601 (rel. June 21, 2017).

[9] *See, e.g.*, Comments of the Satellite Industry Association, GN Docket No. 17-183, filed Oct. 2, 2017, at 41-44.

Respectfully submitted,

THE SATELLITE INDUSTRY ASSOCIATION

By: */s/ Tom Stroup*

Tom Stroup
President
Satellite Industry Association
1200 18th Street N.W., Suite 1001
Washington, D.C. 20036
(202) 503-1560

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